DERWENT-ACC-NO: 2002-225856

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TITLE: Planographic printing method, for recording image,

comprises forming

distribution of hydrophobic and hydrophilic areas

as-per-image on

photocatalytic original printing plate, heating and

irradiating with activation

light

INVENTOR: MORI, N; NAKAMURA, T

PATENT-ASSIGNEE: FUJI PHOTO FILM CO LTD[FUJF]

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PATENT-FAMILY:

PUB-NO PUB-DATE LANGUAGE

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APPLICATION-DATA:

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ABSTRACTED-PUB-NO: US20020001776A

BASIC-ABSTRACT: NOVELTY - A hydrophobic layer is uniformly

provided on an original printing plate having photocatalytic property. The original plate is heated between 40-200 deg. C and irradiated with activation light to form hydrophilic and hydrophobic areas as-per-image. Printing is performed in the ink accepting hydrophobic areas.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for: (a) Original plate for planographic printing; and (b) Planographic printing press comprising a mounting unit for mounting original plate, a processing unit for hydrophobically processing the entire surface of original plate on which hydrophobic layer is formed, an activation light irradiation unit (5) for irradiating activation light, a heating unit, an ink supply unit for supplying an ink to hydrophobic area and a damping solution to hydrophilic area, and a printing unit for printing by bringing a printing surface, so that the hydrophobic area accepts the ink and hydrophilic area accepts the damping solution.

USE - For recording images.

ADVANTAGE - The photocatalyst material simplifies printing and platemaking The printing plate is prepared directly without process. requiring any development process. The plate preparation time is shortened, and durability and print quality are improved. Polarity changing rate of the photocatalyst substance is made fast by irradiation. The planographic printing method has high sensitivity to activation light, and ensures an excellent distinction property of imaged and non-imaged portions. The method enables complete deletion of the image history on the printing plate, and enables repeated use of the original printing plate. The method enables

inexpensive offset printing.

DESCRIPTION OF DRAWING(S) - The figure shows a view of the construction of an offset printing press.

Plate cylinder 1

Hydrophobic processing unit 2

Damping solution supply unit 3

Ink wash-off unit 4

Activation light irradiation unit 5

CHOSEN-DRAWING: Dwg.2/10

TITLE-TERMS:

PLANOGRAPHIC PRINT METHOD RECORD IMAGE COMPRISE FORMING DISTRIBUTE HYDROPHOBIC HYDROPHILIC AREA PER IMAGE PHOTOCATALYST ORIGINAL PRINT PLATE HEAT IRRADIATE ACTIVATE LIGHT

DERWENT-CLASS: A89 G07 P84

CPI-CODES: A12-L02B1; A12-W07B; G05-A01; G06-D05;

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